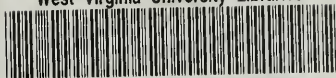


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BULLETIN NO. 3.

OF THE

WEST VIRGINIA

Agricultural Experiment Station

AT

MORGANTOWN, W. VA.,

DECEMBER, 1888.

Prepared under the Auspices of the West Virginia Agricultural Experiment Station.

BY WM. D. DOAN.

JOHN A. MYERS, Director.

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LETTER OF TRANSMITTAL.

PROF. JOHN A. MYERS,

Director West Virginia Agr. Exp't Station,

Morgantown, W. Va.:

SIR :—I herewith transmit my report on the Birds of West Virginia, including notes on their food-habits, on which, as you are aware, I have been engaged since August 1. I arrived at Buckhannon, Upshur County, on the above date and began field work the following day. The work was carried on in that vicinity for several days, during which time I made short excursions down the Buckhannon River for ten or twelve miles. August 19 I went to Braxton Court House; thence to Gauley Mountains; thence to Rich Mountains and the headwaters of Middle Fork and Buckhannon Rivers, and down the last named river, and arrived at Buckhannon September 7. Leaving for Weston the following day, I visited Fairmont, remaining there until Sept. 24. From thence my route was to Wheeling and down the Ohio River to Parkersburg, at which place I remained until the evening of October 10, when I proceeded to Lewisburg, Greenbrier County, making short stops at Point Pleasant and Charleston. From Lewisburg I worked my way up the Alleghanies to Patterson Creek, and on to Green Springs and Romney, Hampshire County, at which point my field work ended.

During the last five weeks in the field the inclemency of the weather was such that it was impossible for me to do any collecting whatever; and as the season was far advanced

and the remaining time short, my explorations were necessarily hurried. Much valuable time was lost in traveling in order to reach all the different districts, many of which are widely separated and remote from railroads. By far the most productive and satisfactory work was done at Buckhannon and vicinity during the month of August. The following list contains all species that I personally identified, together with a few additions from Mr. William Brewster's paper on the "Birds of Ritchie County, and W. E. D. Scott's "Birds of Kanawha County." It is far from complete, but may be considered a starting point for future investigations.

I wish to acknowledge my indebtedness to Dr. J. R. Mathers and Mr. E. L. Day, of Buckhannon, for valuable notes on several species with which I did not meet.

I am, sir, very respectfully,

WM. D. DOAN.

Nov. 30, 1888.

BIRDS OF WEST VIRGINIA.

BY WM. D. DOAN.

1. HOLBÆLL'S GREBE.

Colymbus holboëllii (Reinh.).

Transient visitant; rare. A few are seen occasionally on the Ohio and Great Kanawha Rivers. I observed a single individual September 28, while going down the Ohio River. Dr. Mathers informed me that he shot a specimen on Buckhannon River in November, 1884.

2. HORNED GREBE.

Colymbus auritus Linn.

Transient visitant; rare. More frequently met with along the larger streams than the preceding species.

3. PIED-BILLED GREBE.

Podilymbus podiceps (Linn.).

Transient visitant; common; frequenting streams. Known under various local names, such as Dabchick, Hell-diver, Chicken-billed Duck, and Die Dipper. I found this Grebe August 28, on the head-waters of Buckhannon River, but did not meet with it again until September 13, while on my way down the Monongahela River. I am led to believe that it breeds on some of the mountain streams. A month later I met with it frequently along the Great Kanawha River. Of the three species of Grebes that visit West Virginia this is the most

common, and may be found on all rivers and ponds during then spring and fall months.

4.

LOON

Urinator imber (Gunn.).

Transient visitant. Tolerably common on the Ohio and Great Kanawha. It has been taken frequently on Buckhannon, Cheat, Monongahela, and South Branch of the Potomac Rivers. I observed a single individual on Greenbrier River October 15.

5.

HERRING-GULL.

Larus argentatus smithsonianus (Coues.)

Accidental in spring. Dr. Mathers has observed it during that season.

6.

MERGANSER SHELLDRAKE.

Merganser americanus (Cass.).

Transient visitant; tolerably common. This species is known throughout the State as Fish Duck. I observed it frequently along the different streams after September 20. This and the following Mergansers feed mainly, if not wholly, on fish.

7.

RED-BREASTED MERGANSER.

Merganser serrator (Linn.).

Like the preceding, this species is also known as Fish Duck. It occurs occasionally as a transient visitant.

8.

HOODED MERGANSER.

Lophodytes cucullatus (Linn.).

Transient visitant; rare. Mr. Brown, of Parkersburg, has a stuffed specimen of this Merganser, which he procured on the Ohio several years ago. He has observed it occasionally since in fall and early spring. The Hooded seems to be the rarest of the three Mergansers that frequent the country visited, and the Shelldrake the most abundant. W. E. D. Scott took a specimen of this Merganser August 9, 1872, on the great Kanawha River. It was an immature female.

9. MALLARD.

Anas boschas Linn.

Transient visitant; common. This duck is sometimes known by the name of Green-head. I met with it during the last week of October along the South Branch of the Potomac, in Hampshire County.

10. BLACK DUCK.

Anas obscura Gmel.

Transient visitant; common on the Ohio River, where I met with it frequently after October 1, as well as on several of the smaller streams, where it is known as the Dusky Duck.

11. GADWALL.

Anas strepera Linn.

Transient visitant; tolerably common on all the larger streams. It is generally known as the Gray Duck.

12. WIDGEON.

Anas americana Gmel.

Transient visitant. I did not observe any until November 3, and then one only, which was taken on the Potomac River, near Green Springs, Hampshire County.

13. GREEN-WINGED TEAL.

Anas carolinensis Gmel.

Transient visitant; tolerably common. Dr. Mathers informed me that this Teal is very common some seasons on Buckhannon River. I did not see it until descending Cheat River on the morning of October 22.

14. BLUE-WINGED TEAL.

Anas discors Linn.

Transient visitant; rare.

15. SHOVELLER.

Spatula clypeata (Linn.).

Transient visit; tolerably common.

16.

PINTAIL.

Dafila acuta (Linn.).

Transient visitant; tolerably common.

17.

WOOD DUCK.

Aix sponsa (Linn.).

Summer resident; common. Often called Summer Duck. It is considered the most beautiful of the many species of the Duck family that frequent the State, and is well known from the brilliant metallic coloring of its plumage. I found it more common on Buckhannon and Middle Fork Rivers than in any other portion of the State. In the autumn it feeds largely upon acorns, beech nuts, and elder berries.

18.

RED HEAD.

Aythya americana (Eyt.).

Transient visitant. This duck is tolerably common on the Ohio River in later fall, and is occasionally met with on streams in the interior. I observed it on Greenbrier River October 16.

19.

CANVAS-BACK.

Aythya vallisneria (Wils.).

Transient visitant; tolerably common. The Canvas-back is sometimes mistaken by sportsmen for the Red-head. On two occasions I observed stuffed specimens of it labeled "Red-head." In the Canvas-back nearly the whole head is reddish-brown, obscured with dusky about the bill, and the entire bill is dusky. In the Red-head the head is clear chestnut-red, with a bronzy reflection, and the bill is clear, pale grayish-blue, with a black tip.

20.

GREATER SCAUP DUCK.

Aythya marila nearctica Stejn.

Transient visitant; rare. Occurs occasionally on the Ohio and Great Kanawha Rivers, and is known as the Broad-bill and Big Black-head.

21. LESSER SCAUP DUCK.

Aythya affinis (Eyt.).

Transient visitant; common. This species is more common than the foregoing. I observed it on the Monongahela River; also on Valley River September 24.

22. GOLDEN-EYE.

Glaucionetta clangula americana (Bonap.).

Transient visitant; tolerably common. I did not meet with this Duck, but was informed by the captain of the Courier (one of the Ohio steamers) that it generally appears by the last week of September, and is known by the name of Whistler.

23. BUFFLE-HEAD.

Charitonetta albeola (Linn.).

Transient visitant. Common on suitable streams throughout the State, and one of the earliest ducks to arrive from the north in fall. I found it common on the Ohio September 26, and later on Greenbrier, Cheat, and South Branch of the Potomac Rivers.

24. CANADA GOOSE.

Branta canadensis (Linn.).

Transient visitant; abundant. I observed quite a large flock November 3, passing up the South Branch of the Potomac. They are called Wild Geese, and occasionally stop in some favorable locality to feed.

25. WHISTLING SWAN.

Olor columbianus (Ord.).

Transient visitant; tolerably common. I did not observe any swans, but was informed by people living at Romney that large flocks appear there in fall and spring. In the fall of 1887 great numbers were killed at that place on the meadows along the South Branch. Several pairs of wings were shown me which were secured at that time.

26.

BITTERN.

Botaurus lentiginosus (Montag.).

Summer resident; common. Breeds in suitable localities throughout the State.

27.

LEAST BITTERN.

Botaurus exilis (Gmel.).

Summer resident; probably of rare occurrence. I saw but one, which flew up from a reedy swamp along the banks of Great Kanawha River. Dr. Mathers informs me that he has taken it on Buckhannon River in summer.

28.

GREAT BLUE HERON.

Ardea herodias Linn.

Summer resident; common. I found it more plentiful on the Ohio, Monongahela, Great Kanawha, and Cheat Rivers than elsewhere. It breeds in pairs in Buckhannon, Middle Fork, and Greenbrier Rivers, where it is known by the name of Crane. The Great Blue Heron feeds principally on frogs, fish, and mice.

29.

AMERICAN EGRET.

Ardea egretta Gmel.

Accidental visitant from the South. Only two instances of its occurrence in the State have come to my knowledge. Dr. Mathers informed me that a single specimen was taken near Buckhannon several years ago, and Mr. Brown, of Parkersburg, procured one in the summer of 1886, on Little Kanawha River. It is commonly known by the name of White Crane.

30.

LITTLE BLUE HERON.

Ardea cœrulea Linn.

Summer resident; rare. I observed a single individual of this species on Blennerhassett Island October 3. I also saw a mounted specimen in Charleston, which had been shot in July on Great Kanawha River.

31.

GREEN HERON.

Ardea virescens Linn.

Summer resident; common. Found throughout the country visited. It frequently breeds in colonies of four to eight pairs. Occasionally a single pair takes up its abode in an orchard at some distance from any stream. It is often named Poke or Fly-up-the-creek.

32. BLACK-CROWNED NIGHT HERON.

Nycticorax nycticorax nævius (Bodd.).

Transient visitant; tolerably common. A few may breed along the head-waters of Valley and Cheat Rivers. It was not met with on the Ohio until after October 12.

33.

SANDHILL CRANE.

Grus mexicana (Mull.).

Accidental straggler. Mr. E. L. Day, of Buckhannon, informed me that a resident of Upshur County killed a fine specimen of this species near that place in the spring of 1884.

34.

VIRGINIA RAIL.

Rallus virginianus Linn.

Transient visitant; tolerably common in suitably localities throughout the country visited after September 24. Several sportsmen informed me that it sometimes breeds along the Ohio River.

35.

SORA.

Porzana carolina (Linn.).

Transient visitant; tolerably common. Frequents the same localities as the Virginia Rail.

36.

FLORIDA GALLINULE.

Gallinula galeata (Licht.).

Accidental visitant. A specimen of this species was killed by a resident of Weston, Lewis County, July 30, 1888. It may

occur regularly in spring and fall along the Ohio River, but I did not meet with it.

37.

COOT.

Fulica americana Gmel.

Transient visitant; common along streams and ponds throughout the State. Probably breeds along Cheat River and the head-waters of Valley River, where I procured a specimen August 21. It was very common on the Ohio after October 1.

38.

NORTHERN PHALAROPE.

Phalaropus lobatus (Linn.).

Transient visitant; rare. I killed a specimen on the Ohio River, north of Parkersburg, Wood County, September 26, which was the only one seen. E. L. Day, of Buckhannon, has a stuffed specimen which he took along that river.

39.

WOODCOCK.

Philohela minor (Gmel.).

Summer resident; common. Generally distributed throughout the sections visited. A lover of low, damp places.

40.

WILSON'S SNIPE.

Gallinago delicata (Ord.).

Transient visitant. Though tolerably well distributed, they are more common along the Ohio, Great Kanawha, and South Branch of the Potomac, where they afford fine shooting in early spring. I flushed a single bird August 30 in Thomas Farnsworth's meadow, near Buckhannon.

41.

LEAST SANDPIPER.

Tringa minutilla Vieill.

Transient visitant. Tolerably common along the principal streams after September 24, especially so along the Ohio River.

42.

GREATER YELLOW-LEGS.

Totanus melanoleucus (Gmel.).

Transient visitant; rare. I observed two birds only of this

noisy and well known species. They were on the meadows below Point Pleasant, near the Ohio River.

43. SOLITARY SANDPIPER.

Totanus solitarius (Wils.).

Transient visitant; rare. This bird does not frequent open meadows, as does the last named species, but inhabits unfrequented low woods and swampy places covered with alders. It may be more common during the spring migrations than in the fall. I observed a few near Huntington October 14.

44. BARTRAMIAN SANDPIPER.

Bartramia longicauda (Bechst.).

Summer resident; tolerably common near Buckhannon during the month of August, but more plentiful after September 7. I found it very shy and exceedingly hard to approach. It frequents cultivated fields and uplands, and is known in all sections as Upland Plover.

45. SPOTTED SANDPIPER.

Actitis macularia (Linn.).

Summer resident; common along all streams and ponds. It is known as the Little Tilt-up.

46. KILLDEER PLOVER.

Ægialitis vocifera (Linn.).

Summer resident; common. Tolerably abundant during migrations. It is said that a few occasionally remain through the winter season along the Great Kanawha and in the Ohio Valley. Their chief resorts are newly-plowed fields and banks of streams and meadows. In some localities the Killdeer does much good by feeding on grasshoppers.

47. BOB-WHITE; QUAIL.

Colinus virginianus (Linn.).

Resident; common; abundant in a few favored localities. Certain farmers informed me that Quail are very destructive to their grape crops, and also to wild grapes, and maintain that

they should be killed all the year round. This opinion, which may prevail among many casual observers, is likely to hasten the extermination of this noble game-bird, and there is little doubt that it has caused the scarcity of the species in some localities. The law in regard to this game-bird (as well as others) should be more stringent. Quail are beneficial birds, and are seldom injurious to the farmer or fruit-grower. I was informed that Quail were abundant throughout the Ohio Valley a few years ago, but at the present time they cannot be classed as more than a common resident. In the counties bordering the Alleghanies they are still plentiful. They are generally known as Virginia Partridge or Quail. Stomachs of specimens secured contained blackberries, seeds of smartweed, everlasting pea, partridge pea, Solomon's seal, hemlock, summer grape, dogwood, wheat, traces of beetles and *Hymenoptera*.

48.

RUFFED GROUSE.

Bonasa umbellus (Linn.).

Resident and common throughout all sections visited. It is generally called Pheasant. Its food consists of various seeds and fruits, of which the following may be mentioned: River birch (*Betula nigra*), beech (*Fagus ferruginea*), dewberry (*Rubus canadensis*), black raspberry (*Rubus occidentalis*), red raspberry (*R. strigosus*), blue tangle-berry (*Gaylussacia frondosa*), common black huckleberry (*G. resinosa*), deerberry (*Vaccinium stamineum*), blueberry (*V. pennsylvanicum*), and great numbers of insects. During the season when grasshoppers and crickets are abundant, the Grouse flock to the openings and feed greedily upon them.

49.

WILD TURKEY.

Meleagris gallopavo Linn.

Resident; tolerably common. Turkeys are plentiful in parts of Greenbrier, Pocahontas, Randolph, Tucker, Grant, Hardy, and Hampshire Counties, and frequent the highest points of the Alleghanies. They feed upon corn, acorns, wheat, buckwheat, oats, the fruit of river birch (*Betula nigra*), chestnut (*Castanea vesca americana*), beech (*Fagus ferruginea*), red

raspberry (*Rubus strigosus*), black raspberry (*R. occidentalis*), dewberry (*R. canadensis*), blackberry (*R. villosus*), sumach (*Rhus glabra*), common black huckleberry (*Gaylussacea resinosa*), seeds of various grasses, and insects. They destroy large numbers of the red-legged grasshopper (*Caloptenus femur-rubrum*).

50. PASSENGER PIGEON.

Ectopistes migratorius (Linn.).

An irregularly common spring and fall visitor. It was last seen in large numbers in the fall of 1883. Beechnuts, acorns, and chestnuts constitutes its principal food in the fall of the year.

51. MOURNING DOVE.

Zenaidura macroura (Linn.).

Summer resident; abundant along the river bottoms. Stomachs and crops of specimens secured contained buckwheat and seeds of rag or bitter weed.

52. TURKEY VULTURE.

Cathartes aura (Linn.).

Resident; common; breeds in the mountain districts, and may be seen flying over the valleys at any time. Turkey Buzzards feed upon carrion, and are very useful birds.

53. SWALLOW-TAILED KITE.

Elanoides forficatus (Linn.).

An accidental straggler from the south. I procured a fine specimen near the Gauley Mountains August 26. E. L. Day, of Buckhannon, took one a few years ago near the same place. The food of this species consists chiefly of insects and their larvæ, snakes, lizards, and probably frogs and toads.

54. MARSH HAWK.

Circus hudsonius (Linn.).

Summer resident; tolerably common. I met with this species August 5, at Buckhannon, flying over the meadows. I

also secured a specimen at Fairmont September 14. As it is a lover of marshy meadows it was seen more often in such places than in the mountain districts. Its food consists largely of injurious rodents of which the meadow mice (*Arvicolæ*) constitute a large proportion. In the west it kills great numbers of Striped Gophers (Ground Squirrels). Small birds, especially ground loving species, are sometimes taken. Stomach of specimen secured contained a Chipping Sparrow.

55. SHARP-SHINNED HAWK.

Accipiter velox (Wils.).

Resident; common. Universally distributed throughout the country visited, and as often found in the farming as in the wooded districts. The food of this species consist almost entirely of small birds and young poultry. Stomachs of the three specimens received contained two Song Sparrows and one Goldfinch.

56. COOPER'S HAWK.

Accipiter cooperi (Bonap.).

Resident; tolerably common. Cooper's Hawk is a bold, swiftly flying species which feeds largely upon poultry, game, and other birds. To the depredations of this, the preceding, and the following species may be attributed most of the feeling of hatred so generally shown by farmers toward all our hawks.

57. GOSHAWK.

Accipiter atricapillus (Wils.).

Winter visitant; rare in the mountain districts. During severe winters it has been taken several times along the Ohio River. Its food consists largely of game and poultry.

58. RED-TAILED HAWK.

Buteo borealis (Gmel.).

Resident; common along the river bottoms, but less so in the Ohio and Kanawha Valleys. It is generally known as Chicken Hawk, as are all of the larger Hawks. Feeds principally on mice.

39. RED-SHOULDERED HAWK.

Buteo lineatus (Gmel.).

Resident; tolerably common, particularly in the mountain district. I took a specimen September 21. Feeds principally on small mammals, reptiles, and insects.

60. BROAD-WINGED HAWK.

Buteo latis imus (Wils.).

Resident; tolerably common. Frequents the heavy timber. I took several specimens while on the head-waters of Buckhannon River during the last of August. Stomach of specimen secured contained remains of water snake and larvæ of moths.

61. GOLDEN EAGLE.

Aquila chrysaetos (Linn.).

Very rare; occurs only at intervals during spring and fall. Oct. 17, I saw the remains of what must have been a fine specimen of this Eagle. It was nailed to the side of a mountaineer's cabin near Beaver Lick mountains, Pocahontas County, and was shot in the mountains that spring while feeding upon a Wild Turkey. The same person informed me that they frequently appear in the fall but he did not know of their breeding.

62. BALD EAGLE.

Haliaeetus leucocephalus (Linn.).

Resident; tolerably common; breeds in suitable places over the eastern portions of the State. It is of frequent occurrence throughout the Ohio Valley during the early spring and fall. Its food consists principally of fish, occasionally waterfowl, and rarely the young of domesticated animals.

63. DUCK HAWK.

Falco peregrinus anatum (Bonap.).

Resident in the mountains. Common everywhere along the river bottoms and in the forests that cover the higher peaks and

ridges. I secured three fine specimens, one adult and two young, on Rich mountains near the head-waters of Middle Fork River in August. I did not observe any below an altitude of 1,500 feet. The stomachs of those killed contained remains of Quail (*Colinus virginianus*), Cedar Waxwing (*Ampelis cedrorum*), Cardinal Grosbeak (*Cardinalis cardinalis*) and Chipmunk (*Tamias striatus*). They also feed upon ducks, poultry, and game birds.

64.

SPARROW HAWK.

Falco sparverius Linn.

Resident; abundant throughout all sections visited. It breeds in holes in trees, often selecting one in close proximity to farm buildings. This active little bird is familiarly known by every one, and the countless numbers of injurious insects and mice it destroys should command for it the respect and protection of every farmer. It is said to take young chickens occasionally, but of this we have no evidence. Even if this be true it repays tenfold the mischief done in that way by clearing out the noxious vermin that infest barns, outbuildings, and meadows. It feeds principally upon grasshoppers and mice. Stomachs of specimen secured contained grasshoppers, crickets, and katy-dids.

65.

OSPREY; FISH HAWK.

Pandion haliaetus carolinensis (Gmel.)

Summer resident; common. Most plentiful along the larger streams during spring and fall migrations. It is known by the name of Fish Hawk.

66.

BARN OWL.

Strix pratincola Bonap.

Resident; common. I found this species in the mountain districts where it frequents the small meadows and river bottoms, remote from towns. I have frequently found it feeding in the day time. Aug. 23 I killed one which had just captured a Chipmunk.

67. LONG-EARED OWL.

Asio wilsonianus (Less.).

Resident; tolerably common. Frequents deep woods.

68. SHORT-EARED OWL.

Asio accipitrinus (Pall.).

Resident; tolerably common. Frequents the low grassy meadows, over which it may sometimes be seen hunting in the day time. The food of this species consists chiefly of mice, squirrels, insects, and occasionally small birds. Seldom, if ever, does it prey upon the farmer's chickens.

69. BARRED OWL.

Syrnium nebulosum (Frost.).

Resident; common. Large numbers of this species are found throughout the mountain ranges. Mice and insects constitute the principal food of the Barred Owl.

70. SAW-WHET OWL.

Nyctala acadica (Gmel.).

Rare; probably resident in the mountains. I did not encounter it until the last of October, at which time I heard an individual in the evening, along Cheat River.

71. SCREECH OWL.

Megascops asio (Linn.).

Resident; abundant. Generally distributed throughout all localities. A very useful species, destroying large numbers of mice and noxious insects.

72. GREAT HORNED OWL.

Bubo virginianus (Gmel.).

Resident; common. This powerful bird is the largest Owl found in the State. It frequents heavy timber and is seen only occasionally during the day. When thus found and started it is sure to attract the attention of a large audience of small birds. Stomachs of specimens secured contained the remains of a rabbit, crawfish, and May beetle.

73. SNOWY OWL.

Nyctea nyctea (Linn.).

Winter visitant; rare. Dr. Mathers informs me that Snowy Owls are occasionally seen during severe winters.

74. YELLOW-BILLED CUCKOO.

Coccyzus americanus (Linn.).

Summer resident; common. Both this and the following species are called Rain Crow. They frequent the same localities, although I found the Yellow-billed ranging higher up the mountains than the Black-billed. Both are beneficial as insect destroyers. Stomachs of specimens secured contained grasshoppers, crickets, and daddy-long-legs.

75. BLACK-BILLED CUCKOO.

Coccyzus erythrophthalmus (Wils.).

Summer resident; common. Frequents the orchards and shade trees of the towns, in company with the Yellow-billed.

76. BELTED KINGFISHER.

Ceryle alcyon (Linn.).

Summer resident; abundant along all streams and ponds throughout the portions of country visited. It feeds mainly upon fish of different kinds.

77. HAIRY WOODPECKER.

Dryobates villosus (Linn.).

Resident; rather common along the river bottoms and in the mountain districts, but not confined to any particular locality. It was not as common in the cultivated districts as the Downy Woodpecker. It would be very difficult indeed to find a more beneficial class of birds than the Woodpeckers, and they should be universally respected and protected. In the agricultural districts they benefit the trees among which they live, as they are always busily engaged in removing the larvæ of the various boring insects which infest the bark and wood. Stomachs of specimens secured contained traces of *Hymenoptera*, beetles, larvæ of moths, blackberries, corn, and traces of decayed wood.

78. DOWNY WOODPECKER.

Dryobates pubescens (Linn.)

Resident; common. Found everywhere, and like the Hairy very industrious. Of all our Woodpeckers it is by far the most useful to the agriculturist, although many people believe it is attracted to orchards by the sap the trees contain, and hence have named it Sapsucker. I found that name general throughout all sections visited. It does not feed upon the sap of trees, but being a skillful insect hunter, it penetrates the bark where the insects are doing the greatest damage. Stomachs of specimens secured contained remains of beetles, *Hymenoptera*, and larvæ of *Lepidoptera*.

79. YELLOW-BELLIED SAPSUCKER.

Sphyrapicus varius (Linn.).

Transient visitant; common. Did not meet with this species until October 1, when it was found frequenting woods and small groves along the valleys. I have no doubt that it may breed among the higher mountain ridges along the headwaters of Cheat River. It is shy and hard to approach.

80. PILEATED WOODPECKER.

Ceophloeus pileatus (Linn.).

Resident; common. Saw them frequently among the girdled trees in the mountain sections. They were so shy that it was impossible to get within shooting distance. I killed one while it was feeding on the ground. Its stomach contained the remains of corn and the common red ant (*Formica sanguinea*.)

81. RED-HEADED WOODPECKER.

Melanerpes erythrocephalus (Linn.).

Summer resident; common. Most plentiful through the farming districts and river bottoms. At Buckhannon they were abundant during August. Stomachs of specimens secured contained grasshoppers, black ants, beetles, fruit of sour gum, blackberry, wild cherry, corn, buckwheat, seeds of swart-weed, and the pulp of apples.

82. FLICKER.

Colaptes auratus (Linn.).

Summer resident; abundant throughout all sections. Stomachs of specimens secured contained fruit of sour gum, black raspberry, black ants, traces of beetles, *Hymenoptera*, and corn.

83. WHIP-POOR-WILL.

Antrostomus vociferus (Wils.).

Summer resident; common. This species is well known by its notes. Being insectivorous, it is an exceedingly useful bird, destroying millions of injurious insects.

84. NIGHTHAWK.

Chordeilles virginianus (Gmel.).

Summer resident; abundant; was not seen after Sept. 15. Like the last named species it is a very useful bird. Its food consists of winged insects.

85. CHIMNEY SWIFT.

Chætura pelagica (Linn.).

Summer resident; abundant everywhere. Breeds in the mountain districts in trees. I did not observe very many around the chimneys, and I think the use of soft coal prevents them from breeding in such places.

86. RUBY-THROATED HUMMING-BIRD.

Trochilus colubris Linn.

Summer resident; common. The food of the Hummingbird consists of the honey of flowers, small insects, and spiders. They seem to prefer the flowers of the common horse chestnut (*Æsculus hippocastanum*), honeysuckles (*Lonicera*), and trumpet creeper (*Tecoma*). In eastern Pennsylvania I found three species of spiders in their stomachs, namely, *Epeira fasciata*, *E. hortorum*, and *Thomisus fartus*.

87. KINGBIRD.

Tyrannus tyrannus (Linn.).

Summer resident; abundant everywhere, though most com-

mon in the river bottoms. It is generally known as the Bee Martin. Stomachs of the specimens secured contained traces of beetles, grasshoppers, black ants, red raspberries, blackberries, and wild cherries.

88. GREAT CRESTED FLYCATCHER.

Myiarchus crinitus (Linn.).

Summer resident; common along the rivers where heavy timber abounds. This species differs from the rest of the family of Flycatchers, inasmuch as it builds its nests in holes in trees and stubs. Occasionally it nests close to farm buildings. It never excavates holes for itself, but finds a natural hollow or a deserted Woodpecker's hole. In eastern Pennsylvania its food consists largely of the following insects: *Anisopterix pomataria* and *A. vernata*, *Pieris oleracea* (Oleracea Butterfly), *P. rapæ* (the imported cabbage butterfly), *Colias philodice* (sulphur butterfly), corn worm (*Gortyna zeæ*), house fly (*Musca domestica*), white-lined house fly (*Tabanus lineola*), stable fly (*Stomoxys calcitrans*), red ant *Formica sanguinea*, field cricket (*Gryllus abbreviatus*), mosquito (*Culex tæniorhynchus*), and red-legged locust (*Caloptenus femur-rubrum*), besides large numbers of beetles. They occasionally feed upon the fruit of wild strawberry (*Fragaria virginiana*) and wild red raspberry (*Rubus strigosus*).

89. PHŒBE.

Sayornis phœbe (Lath.).

Summer resident; common. This agreeable bird was met with everywhere. Its food, like that of all Flycatchers, consists mainly of insects. In addition to the insects mentioned under the last species the following have been found in stomachs of those killed in eastern Pennsylvania: Crane fly (*Tipula ferruginea*), banded horse fly (*Tabanus cinctus*) Turnus butterfly (*Papilio turnus*), ground beetle (*Lachnosterna quercina*). I have also found them feeding occasionally on the fruit of red cedar (*Juniperus virginiana*) and red currant (*Ribes rubrum*).

90. OLIVE-SIDED FLYCATCHER.

Contopus borealis (Swains.).

Transient visitant; rare. Observed two Sept. 30 on the Little Kanawha River, both of which were captured. Contents of the stomachs consisted of black crickets (*Acheta nigra*), mosquitoes (*Culex teniorhynchus*), and red ants (*Formica sanguinea*).

91. WOOD PEWEE.

Contopus virens (Linn.).

Summer resident, common. The Wood Pewee frequents dense forests, both evergreen and deciduous, where it finds its insect food abundant. Among other insects on which it preys may be mentioned the larvæ of the butterflies *Grapta interrogationis* and *Argynnis cybele*, tent caterpillars (*Clisiocampa americana*), house fly (*Musca domestica*) and red ant (*Formica sanguinea*).

92. YELLOW-BELLIED FLYCATCHER.

Empidonax flaviventris Baird.

This species, which at a distance resembles the Wood Pewee, was not observed. I saw a stuffed specimen in Charleston that had been shot near that place in the spring of 1887.

93. ACADIAN FLYCATCHER.

Empidonax acadicus (Gmel.).

Summer resident; tolerably common. This species is somewhat shy and retiring, frequenting heavy timber near streams and small water courses. Stomachs of specimens secured contained traces of *Diptera*.

94. LEAST FLYCATCHER.

Empidonax minimus Baird.

Transient visitant; probably breeds. I found it common along the borders of the small streams and in small groves and orchards. Stomachs of specimens secured contained traces of beetles.

95.

BLUE JAY.

Cyanocitta cristata (Linn.).

Resident; common. A familiar species and one that is distributed throughout the State. Stomachs of specimens secured contained wheat, corn, blackberries, grasshoppers, traces of beetles, larvæ of moths.

96.

RAVEN.

Corvus corax sinuatus (Wagl.).

Resident; tolerably common in the mountain districts. While passing over the Alleghanies during the middle of October I saw several Ravens, but was unable to secure a specimens. I was informed by the inhabitants that they are very destructive to the poultry, especially during the months of May and June.

97.

CROW.

Corvus americanus Aud.

Resident; abundant and exceeding shy. Of all the birds that inhabit the State the Crow is the most omnivorous. No species has been more persecuted by the farmer, and yet the most of the mischief they do is in the early spring, while they have young nestlings to care for, and it is then they steal a few young birds, chickens, and eggs. For the little corn-pulling they do they amply repay the farmer by destroying multitudes of injurious insects that frequent his cornfields. I have watched them at a distance by the aid of a field glass while in a field where corn was standing, partly in heaps that had been husked out. The Crows did not disturb the corn but fed upon insects and the seeds of bitter weeds. The evil which they do lasts but a brief period, whereas their good services continue during the entire year.

98.

FISH CROW

Corvus ossifragus Wils.

Resident; rare. I saw two Fish Crows on Blennerhassett Island October 2. They were flying across from the island to the Ohio side.

99.

BOBOLINK.

Dolichonyx oryzivorus (Linn.)

Transient visitant; common. May breed in the higher portions of the State. I observed these birds wending their way south on the morning of September 5. In the north their food consists of seeds of various grasses and weeds, grubs, beetles, grasshoppers, and crickets. Stomachs of specimens secured contained seeds of foxtail grass.

100.

COWBIRD.

Molothrus ater.

Summer resident; common, frequenting cultivated districts, particularly about meadows and rivers. It is known along the Great Kanawha as Salt Bird. This species does not build a nest but lays its eggs in other birds' nests. Dr. Coues in his *Birds of the Northwest* gives an interesting pen-sketch of this species. He says: "It is interesting to observe the female Cowbird ready to lay. She becomes disquieted; she betrays unwonted excitement, and ceases her busy search for food with her companions. At length she separates from the flock, and sallies forth to reconnoitre, anxiously indeed, for her case is urgent, and she has no home. How obtrusive is the 'sad' analogy. She flies to some thicket or hedge-row, or other common resort of birds, where something teaches her—perhaps experience—nests will be found. Stealthily and in perfect silence she flits along, peering furtively, alternately elated or dejected, into the depth of the foliage. She espies a nest, but the owner's head peeps over the brim, and she must pass on. Now, however, comes her chance; there is the very nest she wishes, and no one at home. She disappears for a few minutes, and it is almost another bird that comes out of the bush. Her business done, and trouble over, she chuckles her self-gratulations, rustles her plumage to adjust it trimly, and flies back to her associates. They know what has happened, but are discreet enough to say nothing—charity is often no less wise than kind." Stomachs of specimens secured contained timothy and clover seeds.

101. YELLOW HEADED BLACKBIRD.

Xanthocephalus xanthocephalus (Bonap.).

Accidental visitant; rare. Not observed by me. Dr. Mathers took one in the spring of 1886 near Buckhannon, Upshur Co.

102. RED-WINGED BLACKBIRD.

Agelaius phoeniceus (Linn.).

Summer resident; abundant in wet meadows and low lands, and always gregarious, breeding in colonies. Most of them go south by the last of August. They are generally known by the name of Swamp Blackbird. Stomachs of specimens secured contained grasshoppers, katy-dids, seeds of ragweed, smartweed, and blackberries, oats, wheat, and timothy.

103. MEADOW LARK.

Sturnella magna (Linn.) .

Resident; abundant. It is very fond of low meadow lands, but sometimes frequents higher elevated fields. Stomachs of specimen secured contained grasshoppers.

104. ORCHARD ORIOLE.

Icterus spurius (Linn.).

Summer resident; tolerably common. Found mostly among small groves along the valleys and in orchards bordering such places. Its food consists mainly of insects.

105. BALTIMORE ORIOLE.

Icterus galbula (Linn.).

Summer resident; common. This brilliant-plumaged bird is known throughout the State as Hanging-bird." It is more familiar than its near relative the Orchard Oriole, and often makes its home in or near the towns. It is insectivorous, and feeds largely upon coleopterous and hymenopterous insects, together with the leaves of the various *Lepidoptera*.

106.

RUSTY BLACKBIRD.

Scolecophagus carolinus (Mull.).

Transient visitant; common. Small flocks were met with during the last week in October, frequenting swamp and low lands. Stomachs of specimens secured contained elderberries, and traces of larvæ of *Lepidoptera* and *Coleoptera*.

107.

PURPLE GRACKLE.

Quiscalus quiscula (Linn.),

Summer resident; abundant. This species is generally called Crow Blackbird. It is condemned by the farming classes who give it a very bad reputation. It comes in small flocks in early spring, generally frequenting meadows and cultivated fields, and destroying large numbers of insects. As spring advances and the farmers begin to plow, I have observed dozens of these birds following the fresh turned furrows, picking up white grubs and earth worms. After the field has been planted with corn and the tender blades appear, the Blackbirds visit the fields and pluck the young sprouts from their beds, eating the grain and scattering the blades promiscuously around. I have killed them while thus engaged, and their stomachs contained, besides grains of corn, cut worms of various kinds. Still later in the season they feed upon oats and corn in the shock. On my arrival in Buckhannon, August 1, I was informed that a few days previously large numbers of these Blackbirds had congregated every evening in a small field in which oats were standing in shocks, near the town, affording fine shooting for the young sportsmen of the borough. I visited the place August 2, but the grain had been gathered. I found a few birds feeding upon the ground and exceedingly hard to approach. Those that were procured contained oats and clover seeds. Notwithstanding the injury done to farm crops by this species, it does a vast amount of good by destroying innumerable insects. Stomachs of specimens secured contained oats, clover seed, blackberries, and traces of beetles.

108. ENGLISH SPARROW.

Passer domesticus (Linn.).

Resident; abundant. This pest is most plentiful along the lines of the Baltimore & Ohio and Chesapeake & Ohio Railroads. Remote from these lines, and in the interior of the State, it seems to be only tolerably common, but it is increasing each year. I observed it in all the boroughs and smaller villages. In many rural districts it has become the principal species, especially in the Ohio Valley, and it has spread even to the foot hills of the mountains. In regard to this bird as a fruit destroyer, on several occasions I have seen it deliberately plunge its bill into cultivated grapes to obtain the juice, thus destroying large numbers by causing them to wither and decay. The following list embraces much of its food: buds and blossoms of the maple, cherry, apple, pear, and plum; fruits of strawberries, raspberries, blackberries, and grapes; bits of bread, cabbage, potatoes, wheat, corn, and oats; salad, peas, and other herbaceous plants, with a change to a few insects occasionally, but these are few in numbers. Sometimes it feeds upon the seeds of ragweed (*Ambrosia artemisiæfolia*), pigweed (*Amarantus albus*), and lambs' quarters (*Chenopodium album*).

109. PURPLE FINCH.

Carpodacus purpureus (Gmel.).

Transient visitant; tolerably common. I observed a few on November 4 near Romney, Hampshire County.

110. RED CROSSBILL.

Loxia curvirostra minor (Brehm).

Winter visitant; tolerably common. This and the following species are generally confounded under the name Crossbill. In these birds the mandibles are rather long, thick at the base, much curved, and cross each other when the bill is closed. Their food consists principally of seeds of coniferous trees.

111. WHITE-WINGED CROSSBILL.

Loxia leucoptera Gmel.

Winter visitant; rare. Several were taken by Mr. Brown, of Parkersburg, in the pine districts on the east slope of the Alleghanies during severe winters.

112.

GOLDFINCH.

Spinus tristis (Linn.).

Resident; common and generally distributed, but not frequently seen after October 20. The Salad bird, as it is known throughout the State, is chiefly a granivorous species, preferring seeds at all times; still it destroys numbers of small insects while it has young to care for. Stomachs of specimens secured contained weed seeds.

113.

SNOWFLAKE.

Plectrophenax nivalis (Linn.).

Winter visitant; said to be tolerably common in the mountain districts, where it is known as the White Snowbird.

114.

VESPER SPARROW.

Pooecætes gramineus (Gmel.).

Summer resident; tolerably common. Generally called Bay-winged Bunting, or Grassfinch. It frequents old fields and the thickets bordering them.

115.

WHITE-CROWNED SPARROW.

Zonotrichia leucophrys (Forst.).

Winter visitant; common. I found them along the Ohio River in thickets and wooded districts by October 10.

116.

WHITE-THROATED SPARROW.

Zonotrichia albicollis (Gmel.).

Winter resident; common. I found them in company with the White-crowned Sparrow, which frequents much the same kinds of places, and resembles it in habits. Stomachs of specimens secured contained pigweed and other weed seeds.

117.

TREE SPARROW.

Spizella monticola (Gmel.).

Winter resident; common. I saw Tree Sparrows in all sections visited after September 20. Stomach of specimen contained clover seed.

118. CHIPPING SPARROW.

Spizella socialis (Wils.).

Summer resident; common and generally distributed. This species is familiar to every one. It prefers farming districts to waste fields, thickets, and forests, although I occasionally found it in the mountains. Stomach of specimen secured contained weed seeds.

119. FIELD SPARROW.

Spizella pusilla (Wils.).

Summer resident; common; frequents cultivated fields and pastures. Stomach of specimen secured contained grass seeds.

120. SLATE-COLORED JUNCO.

Junco hyemalis (Linn.).

Winter resident. I observed them in the Ohio Valley by September 28, frequenting meadows, thickets, and open fields. It is known as the Black Snowbird. Stomachs of specimens secured contained clover and weed seeds.

121. CAROLINA JUNCO.

Junco hyemalis carolinensis Brewst.

Resident in the higher mountains. I found them August 26 on Rich Mountains, where I was informed they breed. I secured several specimens, but as they were lost with the rest of my skins, I was unable to compare them with the northern form. In the mountain form the under parts are clearer white, the back a brighter blue, and the size somewhat larger than in *hyemalis*. The bill is dark horn color.

122. SONG SPARROW.

Melospiza fasciata (Gmel.).

Resident; abundant and universally distributed, associating with the other Sparrows that frequent open fields, pastures, and groves and orchards. Stomachs of specimens secured contained seeds of foxtail and timothy grass, clover, smartweed and other weed seeds, and traces of beetles.

123. LINCOLN'S SPARROW.

Melospiza lincolni (Aud.).

Transient visitant; rare. I took one September 26 in the Ohio Valley. It was in a thicket of low brush, and was the only one seen.

124. SWAMP SPARROW.

Melospiza georgiana (Jath.).

Winter resident; probably breeds in the higher portions of the State. Common in the Ohio Valley after October 8, frequenting low grounds and borders of woods.

125. FOX SPARROW.

Passerella iliaca (Merr.).

Winter resident; tolerably common. This species was observed among the thickets and underbrush in the vicinity of Romney, Hampshire County, October 29.

126. TOWHEE.

Pipilo erythrophthalmus (Linn.).

Summer resident. Abundant throughout waste grounds and forests, even to the very highest points visited. It is known by the names Ground Robin and Chewink. Stomachs of specimens secured contained seeds of smartweed and traces of *Coleoptera*.

127. CARDINAL.

Cardinalis cardinalis (Linn.).

Resident. Common along the river bottoms, and in fact in all thickets and damp woods in the valleys, where it is known as Redbird and Cardinal Grosbeak. Stomachs of specimens secured contained traces of beetles, blackberry and clover seeds, wheat, and seeds of partridge pea.

128. ROSE-BREASTED GROSBEEK.

Habia ludoviciana (Linn.).

Summer resident; tolerably common. I met with this species the last of August on the head waters of Buckhannon

River, where it appeared to be more common than elsewhere. During the early spring and summer months it prefers open woodlands, close to running streams, although I have observed it in cultivated fields in search of insects. The farmers and fruit growers should become acquainted with this bird, as it stands among the first of the beneficial kinds. It is one of the few species which feed upon the potato beetle.

129. BLUE GROSBEAK.

Guiraca cærulea (Linn.).

Summer resident; apparently rare. I saw three in an old grove near Buckhannon, Upshur County, August 15.

130. INDIGO BUNTING.

Passerina cyanea (Linn.).

Summer resident. Common and generally distributed, but most plentiful along the borders of woods and clearings. It is called Indigo Bird.

131. DICKCISSEL.

Spiza americana (Gmel.).

Summer resident; tolerably common to the Ohio Valley, but not seen elsewhere. I found it most plentiful in fields and pastures, especially clover fields.

132. SCARLET TANAGER.

Piranga erythromelas Vieill.

Summer resident; tolerably common. I observed this species only upon Rich Mountains, where it inhabits heavy timber, and is generally known as the Black-winged Redbird.

133. SUMMER TANAGER.

Piranga rubra (Linn.).

Summer resident; common. It frequents woodland along the valleys. On the headwaters of Buckhannon River it was more common than the Scarlet Tanager.

134.

PURPLE MARTIN.

Progne subis (Linn.).

Summer resident. Common in towns where boxes have been put up for them. As the English Sparrows are increasing, the Martins are fast disappearing. I did not observe any after September 1.

135.

CLIFF SWALLOW.

Petrochelidon lunifrons. (Say.).

Summer resident; common. Found everywhere in bottom lands along the streams, where it breeds. I saw large numbers of their old nests hanging among the rocky cliffs. Swallows are strictly beneficial, destroying large numbers of insects. The Cliff Swallow is often called Mud Swallow.

136.

BARN SWALLOW.

Chelidon erythrogaster (Boddl.).

Summer resident; abundant in the valleys.

137.

TREE SWALLOW.

Tachycineta bicolor (Vieill.).

Summer resident; tolerably common along river bottoms, where it breeds in holes in trees. Unlike the other Swallows, it was not observed near the towns.

138.

BANK SWALLOW.

Clivicola riparia (Linn.).

Summer resident; abundant along streams and railroad cuts, where it breeds in large numbers, nesting in holes bored into the banks.

139.

ROUGH-WINGED SWALLOW.

Stelgidopteryx serripennis (Aud.).

Summer resident; common. I found it most plentiful in and around Buckhannon and Fairmont, which places seem to be well supplied with their favorite nesting resorts, which are stone culverts, bridges, and crevices of rocks.

140.

CEDAR WAXWING.

Ampelis cedrorum (Vieill.).

Resident; abundant. This bird may be identified by the peculiar red and horny appendages usually attached to the tips of the inner wing quills, which resemble red sealing wax (from which it derives the name of Waxwing). The tail has a band of chrome yellow across the tip. These birds are fond of cherries and a few other garden fruits, but notwithstanding all that, they are much more beneficial than injurious, and for this reason should be protected. In different sections visited I observed small flocks feeding upon the berries of red cedar (*Fu-niperus virginiana*), deerberry or hackleberry (*Vaccenium stamineum*), and sour gum (*Nyssa multiflora*). The stomach of a specimen killed in West Virginia contained wild cherries. In eastern Pennsylvania I found the remains of the following insects in their stomachs: house fly (*Musca domestica*), stable fly (*Stomoxys calcitrans*), white-lined horsefly (*Tabanus lineola*), mosquito (*Culex tæniorhynchus*), rose slug (*Selandria rosæ*), and red-legged grasshopper (*Caloptenus femur-rubrum*).

141.

NORTHERN SHRIKE.

Lanius borealis Vieill.

Winter visitant.

142.

RED-EYED VIREO.

Vireo olivaceus (Linn.).

Summer resident; common throughout the State, but seems to prefer orchards and open woodlands, although I found it in the heavy forests that line Greenbrier and Cheat Rivers.

143.

WARBLING VIREO.

Vireo gilvus (Vieill.).

Summer resident; common. The notes of this species may be heard during the middle of the day, when most other birds are silent. It is ever on the alert in quest of insects. It frequents small groves and orchards close to villages and towns. Its food consists chiefly of dipterous and lepidopterous insects.

144. YELLOW-THROATED VIREO.

Vireo flavifrons Vieill.

Summer resident; tolerably common. This beautiful Vireo is olive-green on the back, and the throat and forebreast is bright yellow, changing to white on the belly. It frequents open woods and orchards, where it destroys large numbers of insects. Stomachs of specimens secured contain traces of *Hymenoptera*, *Coleoptera*, and larvæ of *Lepidoptera*.

145. BLUE-HEADED VIREO.

Vireo solitarius (Wils.).

Mr. Brewster, in his List of the Birds of Ritchie County, regarded this species as rather uncommon, but stated that it might breed, as he saw it as late as May 9.

146. WHITE-EYED VIREO.

Vireo noveboracensis (Gmel.).

Summer resident; common; frequents open woods and thickets. Its food is not known to differ from that of the other Vireos.

147. BLACK AND WHITE WARBLER.

Mniotilta varia. (Linn.).

Summer resident; common. This genial little Warbler was plentiful in August in the mountain districts, in which it breeds, but I do not think it nests outside of such places, as I did not observe it in the valleys and lower portion of the country. I found it frequently feeding upon the ground. Stomach of specimen secured contained traces of *Diptera*.

148. PROTHONOTARY WARBLER.

Protonotaria citrea (Bodd.).

Summer resident; rare. I took a specimen of this fine Warbler August 3 near Buckhannon, in a swampy woods. It was the only one seen.

149. WORM-EATING WARBLER.

Helmitherus vermivorus (Gmel.).

Summer resident; common. This species spends much of its time upon the ground, and is always engaged in hunting insects among the fallen leaves. It frequents swampy thickets and hillsides covered principally with laurel (*Kalmia*).

150. BLUE-WINGED WARBLER.

Helminthophila pinus (Linn.).

Summer resident; tolerably common. During August I found this species in the mountain districts, where it breeds, but did not observe it anywhere else.

151. GOLDEN-WINGED WARBLER.

Helminthophila chrysoptera (Linn.).

Transient visitant. I did not observe this Warbler until September 10, at Fairmont, where it was found in woods along Buffalo Creek.

152. NASHVILLE WARBLER.

Helminthophila ruficapilla (Wils.).

Transient visitant. I did not meet with this species, but William Brewster recorded it from Ritchie County in 1874.

153. TENNESSEE WARBLER.

Helminthophila peregrina (Wils.).

Transient visitant; rare. I procured a young female in heavy timber on the banks of the Monongahela River, near Fairmont, September 12. The stomach contained small measuring worms.

154. PARULA WARBLER.

Compsothlypis americana (Linn.).

Summer resident; common. I found this species frequenting the forest and heavy timber along all streams. It was most plentiful during the month of September. It is known by the name of Blue Yellow-Backed Warbler. Stomach of specimen secured contained traces of larvæ of moths.

155.

YELLOW WARBLER.

Dendroica æstiva (Gmel.).

Summer resident; common. This species is generally distributed throughout all sections visited, but was most common among the horse-chestnuts and maples in and around villages. It is generally called Summer Yellowbird.

156. BLACK-THROATED BLUE WARBLER.

Dendroica cærulescens (Gmel.).

Transient visitant; common, frequenting the wooded valleys and hillsides; occasionally found in open woods, where it is a busy gleaner of insects, chiefly beetles (*Coleoptera*).

157. MYRTLE WARBLER; YELLOW-RUMPED WARBLER.

Dendroica coronata (Linn.).

Transient visitant; abundant. I found these Warblers in the Ohio Valley by October 9, among low trees and bushes along the river bottom. Occasionally I found them in waste fields and open woods, where they feed upon the berries of red cedar (*Juniperus virginiana*), and various insects.

158.

MAGNOLIA WARBLER.

Dendroica maculosa (Gmel.).

Transient visitant; tolerably common. This attractive little species was observed frequently among the orchards and small groves. During the last week in September I found it more plentiful on Blennerhasst Island than anywhere else. It is sometimes called Black and Yellow Warbler.

159.

CERULEAN WARBLER.

Dendroica cærulea (Wils.)

Summer resident; tolerably common. I found this species in the heavy timbered bottom lands on the headwaters of Buckhannon River in August. It also frequents the higher wooded districts along the same stream. I did not observe it in any other locality.

160. CHESTNUT-SIDED WARBLER.

Dendroica pennsylvanica (Linn.).

Transient visitant; common. During the last week in September this species was seen in small flocks, composed of eight to ten birds, among the bushes along the Ohio and Little Kanawha Rivers.

161. BAY-BREASTED WARBLER.

Dendroica castanea (Wils.).

Transient visitant. I did not observe this species, but William Brewster states, in his *Birds of Ritchie County*, that Mr. Ingersoll took a specimen in that county May 14, 1874.

162. BLACK-POLL WARBLER.

Dendroica striata (Forst.).

Transient visitant; common; frequents swampy woods along streams. I met with it frequently on the banks of Buffalo Creek, below Fairmont, during the middle of September. Stomach of specimen secured contained traces of beetles and *Diptera*.

163. BLACKBURNIAN WARBLER

Dendroica blackburniæ (Gmel.).

Transient visitant. This charming little Warbler was restricted to heavy timber, frequenting the tops of tall trees for insects.

164. YELLOW-THROATED WARBLER.

Dendroica dominica (Linn.).

Summer resident; tolerably common. I last saw this species August 24, in the heavy timber along the head waters of Middle Fork River, and also high up the mountain side.

165. BLACK-THROATED GREEN WARBLER.

Dendroica virens (Gmel.).

Transient visitant; common; found in the same localities as *D. caerulescens*, both being frequently met with after September 24.

166.

PINE WARBLER.

Dendroica vigorsii (Aud.).

Summer resident; rare. I met with this species once near Parkersburg, in a tract of pine timber along the Little Kanawha River. Mr. Brown, of that town, has two stuffed specimens that he took in the same place during July.

167.

PALM WARBLER.

Dendroica palmarum (Gmel.).

Transient visitant; tolerably common. I observed this species frequenting the thickets and small trees along the South Branch of the Potomac River October 27. It was extremely shy. In eastern Pennsylvania I have found in the stomachs of this species red ants (*Formica sanguinea*), and house flies (*Musca domestica*).

168.

PRAIRIE WARBLER.

Dendroica discolor (Vieill.).

Transient visitant; rare. I took a specimen of this species October 23 at Green Springs, Hampshire County, in a small belt of timber near the Potomac River. It was the only one observed.

169.

OVEN-BIRD.

Seiurus aurocapillus (Linn.).

Summer resident; common in all wooded districts, but more plentiful in low damp woods in the mountains. It is chiefly terrestrial.

170.

WATER-THRUSH.

Seiurus noveboracensis (Gmel.).

Summer resident; tolerably common along the streams and small pools which are plentiful in some sections towards the mountains. I did not observe them in the Ohio or Great Kanawha Valleys.

171. LOUISIANA WATER-THRUSH.

Seiurus motacilla (Vieill.).

Summer resident; common, frequenting the banks of streams and swampy and low damp woods where there is clear running water. It is an exceedingly shy species, and is mainly terrestrial.

172. KENTUCKY WARBLER.

Geothlypis formosa (Wils.).

Summer resident; tolerably common. It was met with very frequently along the low bushes that border the banks of Buckhannon River; also in the Ohio Valley near Parkersburg. Stomachs of specimens secured contained traces of *Hymenoptera* and *Diptera*.

173. MOURNING WARBLER.

Geothlypis philadelphia (Wils.).

Transient visitant; rare. I took one September 16, at Fairmont, where it was feeding among some low bushes in a swampy woods. Stomach of specimen secured contained traces of *Coleoptera* and larvæ of *Lepidoptera*.

174. MARYLAND YELLOW-THROAT.

Geothlypis trichas (Linn.).

Summer resident; common. This beautiful and active species is generally distributed throughout low swampy localities.

175. YELLOW-BREASTED CHAT.

Icteria virens (Linn.).

Summer resident; apparently rare. It frequents thickets and dense undergrowth on hillsides and is generally known as the ventriloquist of the woods. Persons not familiar with its habits may look for it in vain. One moment its notes are heard from a spot close by, and the very next they come from some distant point, always leaving one in doubt as to its whereabouts. This species is about the size of the Catbird. Its upper parts are bright olive green, the throat and breast are bright yellow, and the belly white.

176. HOODED WARBLER.

Sylvania mitrata (Gmel.).

Summer resident; tolerably common. I found this species both high up on the mountain and in the thickets and dense undergrowth along Buckhannon River, but did not meet with it in any other locality. Mr. W. E. D. Scott found it common and breeding in Kanawha County.

177. WILSON'S WARBLER.

Sylvania pusilla (Wils.).

Transient visitant; tolerably common. During the last week in September it was occasionally seen in retired places among low bushes bordering the hillsides along the Ohio Valley.

178. CANADIAN WARBLER.

Sylvania canadensis (Linn.).

Transient visitant; may breed in the higher mountains. This species frequents heavy timber. Occasionally it was seen in the cultivated fields where there were patches of second growth.

179. REDSTART.

etophaga ruticilla (Linn.).

Summer resident; common. This species is generally distributed. It is found not only in woodlands, but also among the maples that line the principal streets of the villages, where it is a busy little gleaner, spending most of its time in quest of insects. Stomach of specimen secured contained traces of *Diptera*.

180. MOCKINGBIRD.

Mimus polyglottos (Linn.).

Summer resident; rare. I observed this species September 27, on Blennerhassett Island, among the dense undergrowth. Mr. Brown informed me that he has taken it occasionally during the summer season.

181. CATBIRD.

Galeoscoptes carolinensis (Linn.).

Summer resident; abundant. This well known species was found everywhere and is detested by all the farmers and fruit growers. Admitting that it destroys some fruit, it may be said on the other hand that it does not give up destroying injurious insects for such food, and that its food consists chiefly of insects.

182. BROWN THRASHER.

Harporhynchus rufus (Linn.).

Summer resident; common. The Brown Thrush, as it is usually called, frequents heavy timber and waste grounds overgrown with brier bushes; also thickets bordering streams, gleaned much of its food from the ground. This species is one of our sweetest songsters. Its food consists largely of insects and berries. Stomachs of specimens secured contained berries of common elder.

183. CAROLINA WREN.

Thryothorus ludovicianus (Lath.).

Resident; common. This wren is much larger than the common House Wren (*Troglodytes ædon*). It is generally known around the sugar camp as "Sugar Bird." Stomach of specimen secured contained traces of beetles.

184. BEWICK'S WREN.

Thryothorus bewickii (Aud.).

Summer resident; rare. I observed a few in and around the villages and towns.

185. HOUSE WREN.

Troglodytes ædon Vieill.

Summer resident; common. This species is one of the boldest and most venturesome little creatures in the wren family. It makes its home in towns and villages throughout the State, and does much good by devouring multitudes of insects.

186.

WINTER WREN.

Troglodytes hiemalis Vieill.

Winter resident; tolerably common. I did not meet with this species, but it has been recorded from the State.

187.

LONG-BILLED MARSH WREN.

Cistothorus palustris (Wils.).

Summer resident; tolerably common. It was observed along the banks of the Ohio and Great Kanawha Rivers, among the flags and grasses that here and there border the streams.

188.

BROWN CREEPER.

Certhia familiaris americana (Bonap.).

Winter resident; common. Dr. Mathers informed me that this little species is very plentiful during the winter months. It frequents dense forests, and occasionally is found among the orchards.

189.

WHITE-BREASTED NUTHATCH.

Sitta carolinensis Lath.

Resident; abundant; generally distributed throughout all sections, but more plentiful among the heavy timber in the bottom lands. From early morning until the close of day it is busily engaged gathering its insect food from the trunks and branches of the trees. Stomachs of specimens secured contained remains of beetles and larvæ of *Lepidoptera*.

190.

TUFTED TITMOUSE.

Parus bicolor Linn.

Resident; abundant. Found everywhere in the forests and orchards, and at all times busily employed searching for insects. They prefer the heavy timber in the valleys. Stomachs of specimens secured contained traces of *Hymenoptera* and *Diptera*, pulp of apple, buds, blackberry and weed seeds.

191.

CAROLINA CHICKADEE.

Parus carolinensis Aud.

Resident; common. It is most plentiful along the Ohio Valley. Like other Chickadees it is a lover of woods. Occasion-

ally it may be seen among the orchards. Stomach of specimen secured contained traces of *Hymenoptera*.

192. GOLDEN-CROWNED KINGLET.

Regulus satrapa Licht.

Winter visitant; common. I observed this species in the Ohio Valley October 10, frequenting high open woodlands. Its food consists chiefly of insects. Stomach of specimen secured contain traces of *Diptera*.

193. RUBY-CROWNED KINGLET.

Regulus calendula (Linn.).

Winter visitant; common. I did not find this species until October 24, at Romney, Hampshire County, where it was very common among the tracts of woodland near the South Branch of the Potomac.

194. BLUE-GRAY GNATCATCHER.

Pholioptila cærulea (Linn.).

Summer resident; tolerably common. Frequents heavy timber in the valleys. These tiny birds find most of their insect food among the tops of the tallest trees, though they occasionally descend to the ground.

195. WOOD THRUSH.

Turdus mustelinus Gmel.

Summer resident; common; generally found in dense forests and thickets. This species is sometimes call Wood Robin, and can be easily distinguished from the rest of Thrushes, as its upper parts are tawny-brown, brightest on the head. Moreover it is the largest of its genus. It is a charming singer, and may be seen in early evening perched upon the very tip-top of some tall tree close to its favorite resorts, pouring forth its beautiful notes until the last rays of the sinking sun have disappeared behind the western horizon. Its food consists chiefly of insects and berries.

196. WILSON'S THRUSH.

Turdus fuscescens Steph.

Transient visitant; tolerably common. May breed in the mountains. I observed a few of this species among the thickets along the South Branch of the Potomac River October 26.

197.

OLIVE-BACKED THRUSH.

Turdus ustulatus swainsonii (Cab.).

Transient visitant. Inserted on the authority of Mr. William Brewster, who records it in his Birds of Ritchie County. I did not meet with it.

198.

HERMIT THRUSH.

Turdus aonalaschkæ pallasii (Cab.).

Transient visitant; tolerably common. This is another Thrush I did not meet with. Mr. William Brewster found it in Ritchie County during April and May, where it frequented elevated woods. In this species the upper parts are olivaceous, excepting the tail, which is rufous.

199.

ROBIN.

Merula migratoria (Linn.).

Summer resident; abundant. The Robin is one of the most abundant birds in West Virginia, and I have no doubt that many of them remain throughout the winter months in the southern portion of the State, but this, I think, depends entirely on the food supply during that time of year. This species should receive more of the farmers' attention than it does, as it is pre-eminently insectivorous. It occasionally feeds upon fruits, both the wild and cultivated kinds, while they are in season, but this period is short of duration, and during the rest of the year it destroys large numbers of injurious insects. Among wild fruits it feeds upon high blackberry (*Rubus villosus*), wild red raspberry (*R. strigosus*), dewberry (*R. canadensis*), black raspberry (*R. occidentalis*), strawberry (*Fragaria virginiana*), wild black cherry (*Prunus serotina*), and common red cherry (*P. cerasus*), and in autumn it feeds upon the berries of common poke (*Phytolacca decandra*). Stomach of specimen secured contained grasshoppers and a white grub.

200.

BLUEBIRD.

Sialia sialis (Linn.).

Summer resident; common. This species is generally distributed, and is the first harbinger of spring. Stomach of specimen secured contained grasshoppers and larvæ of *Lepidoptera*.

